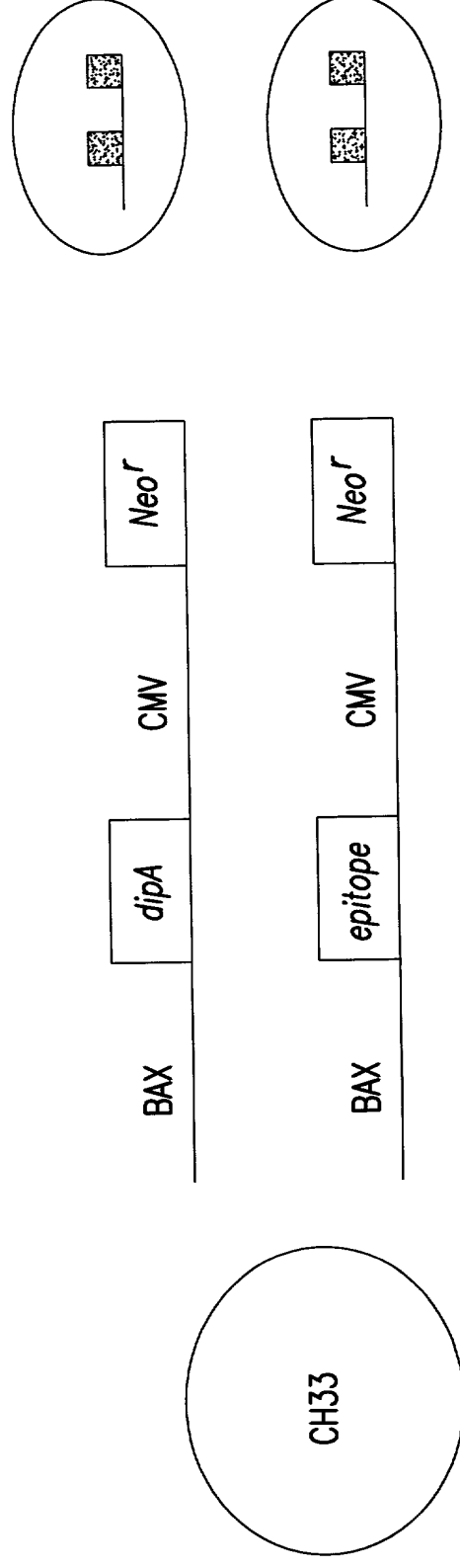


FIG.1

PREPARATION OF TARGET CELL LINES

EARLY B CELL PRECURSORS ARE TRANSFECTED WITH THE SELECTION CONSTRUCT



VALIDATION OF MODIFIED CH33 TARGET CELL LINES

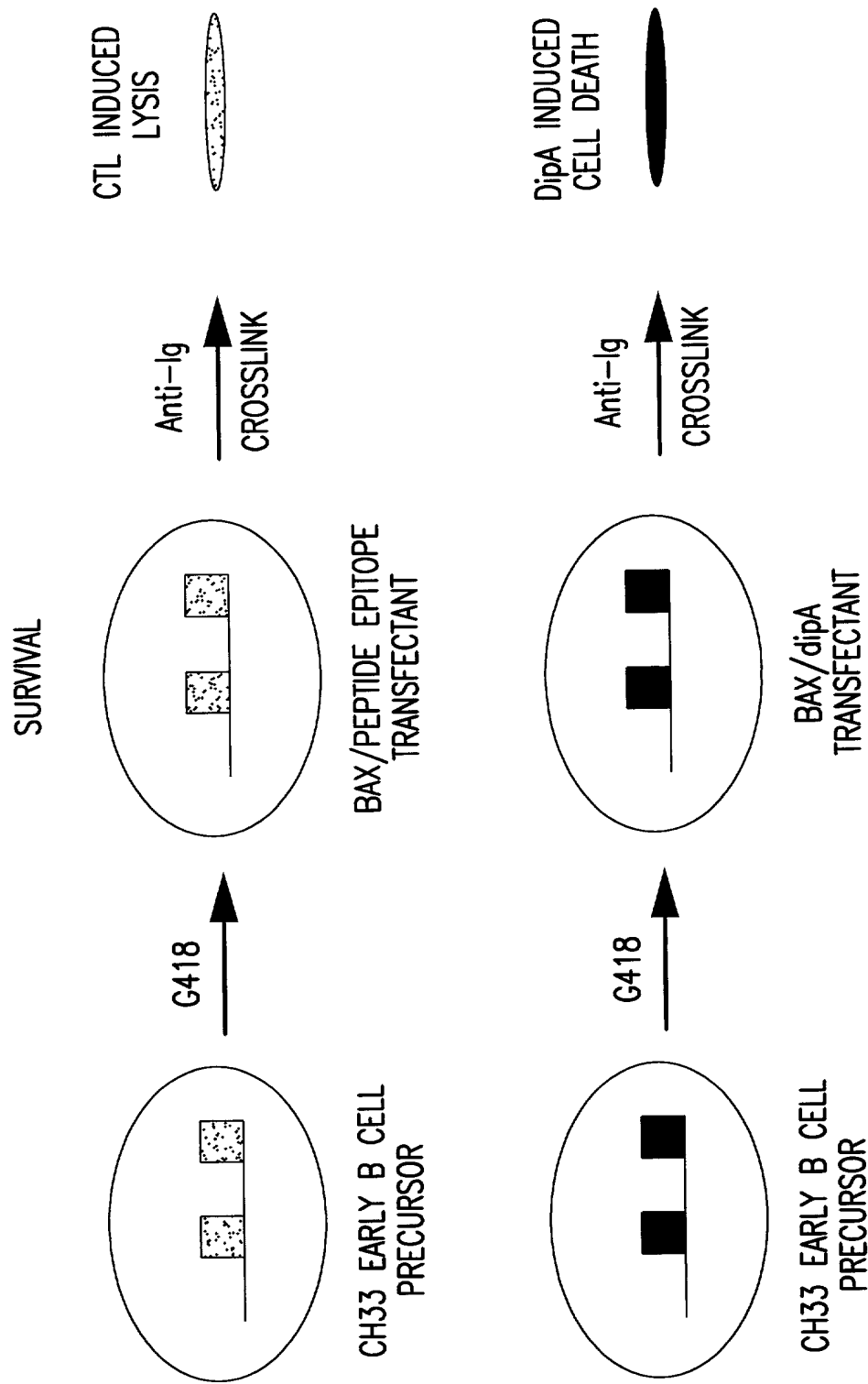
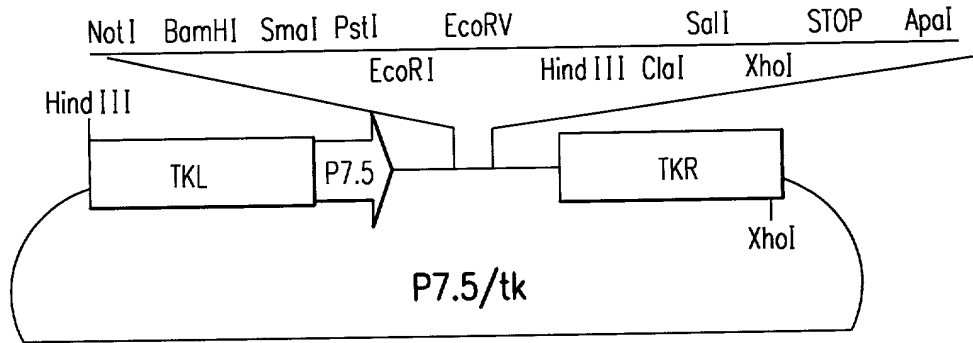
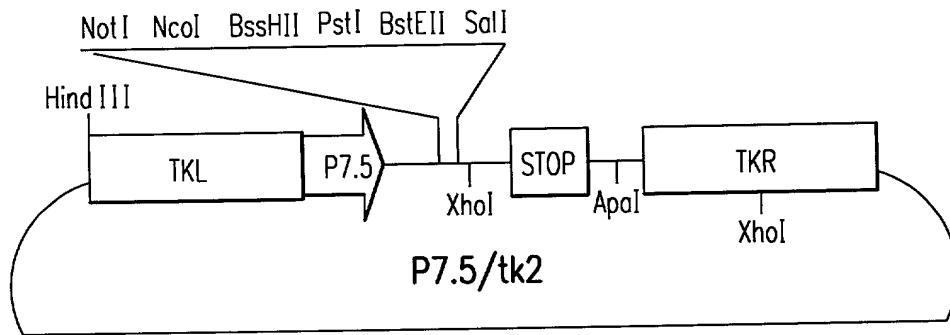


FIG.2B

CONSTRUCTION OF pVHE



REPLACE MCS



CLONE IN SIGNAL PEPTIDE aa -19 TO -3 AT **Nco I**
AND **BssH II** = p7.5/tk2L

CLONE IN $C\mu$ (INCLUDING aa 109 TO 113)
AT **BstE II** AND **Sal I**

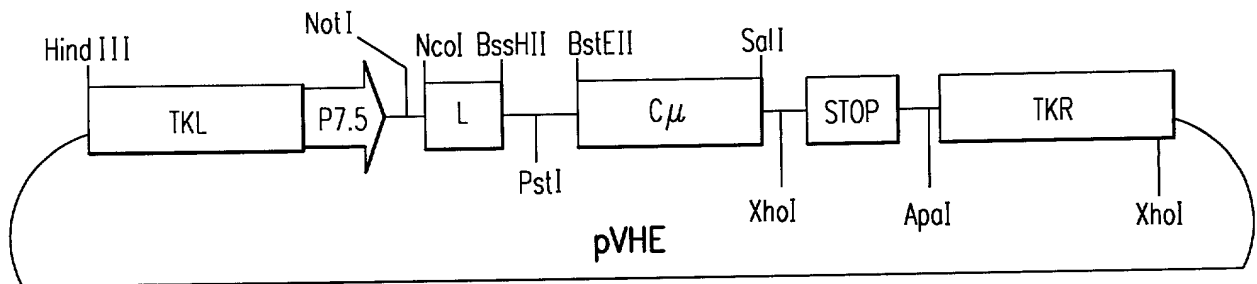


FIG.3

CONSTRUCTION OF pVKE AND pVLE

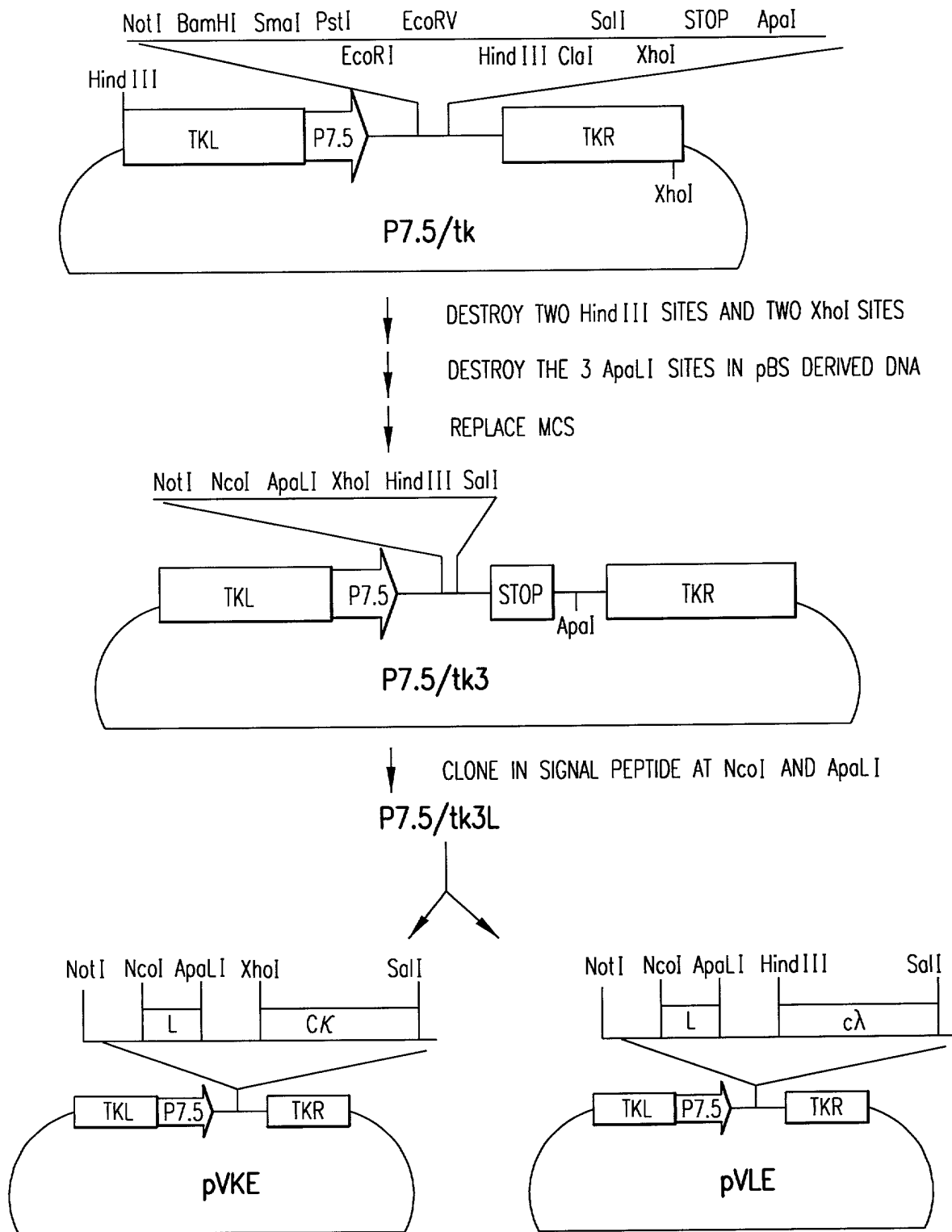


FIG.4

SELECTION FOR SPECIFIC HUMAN ANTIBODY BY ANTIGEN-DEPENDENT ADHERENCE

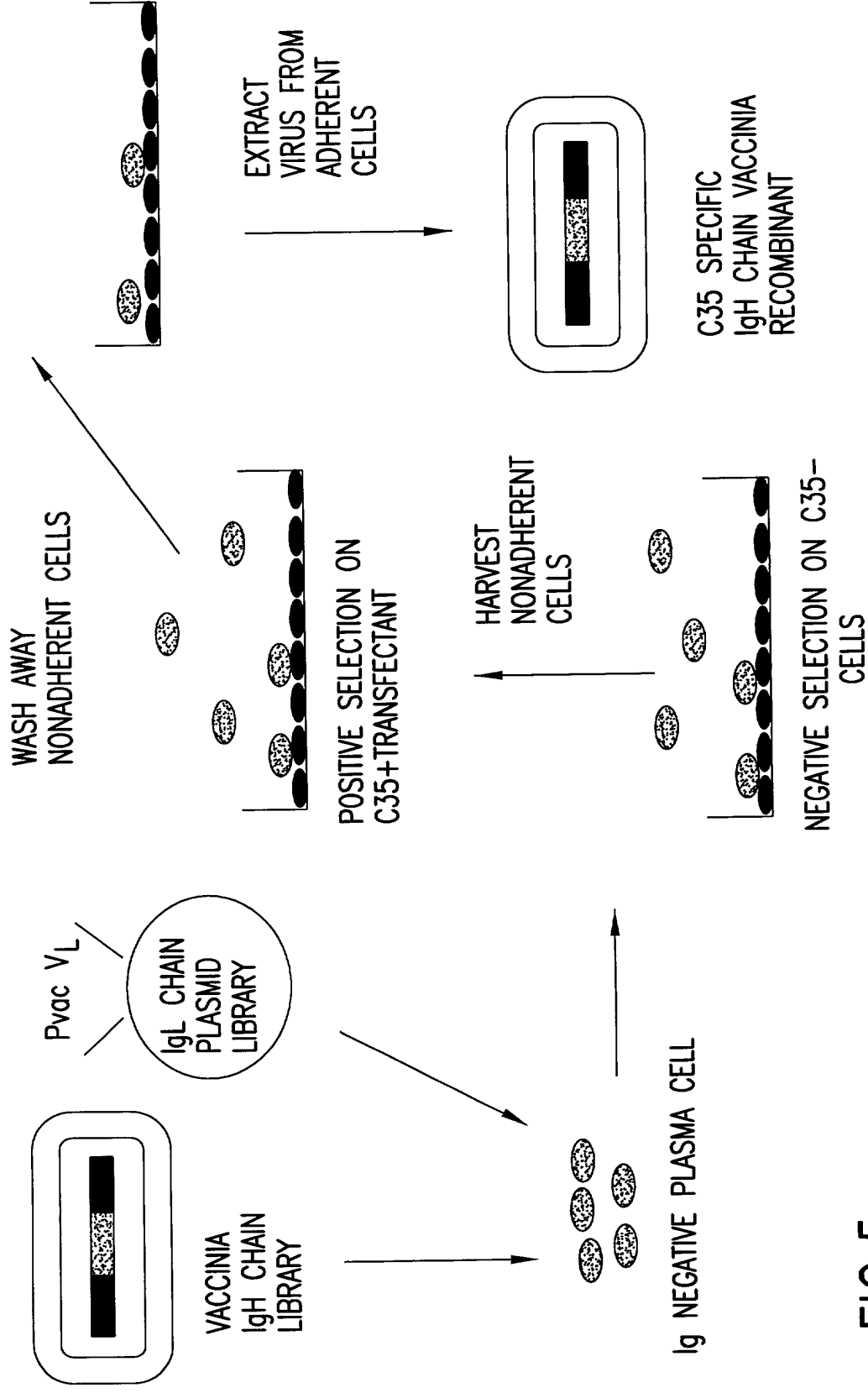


FIG.5

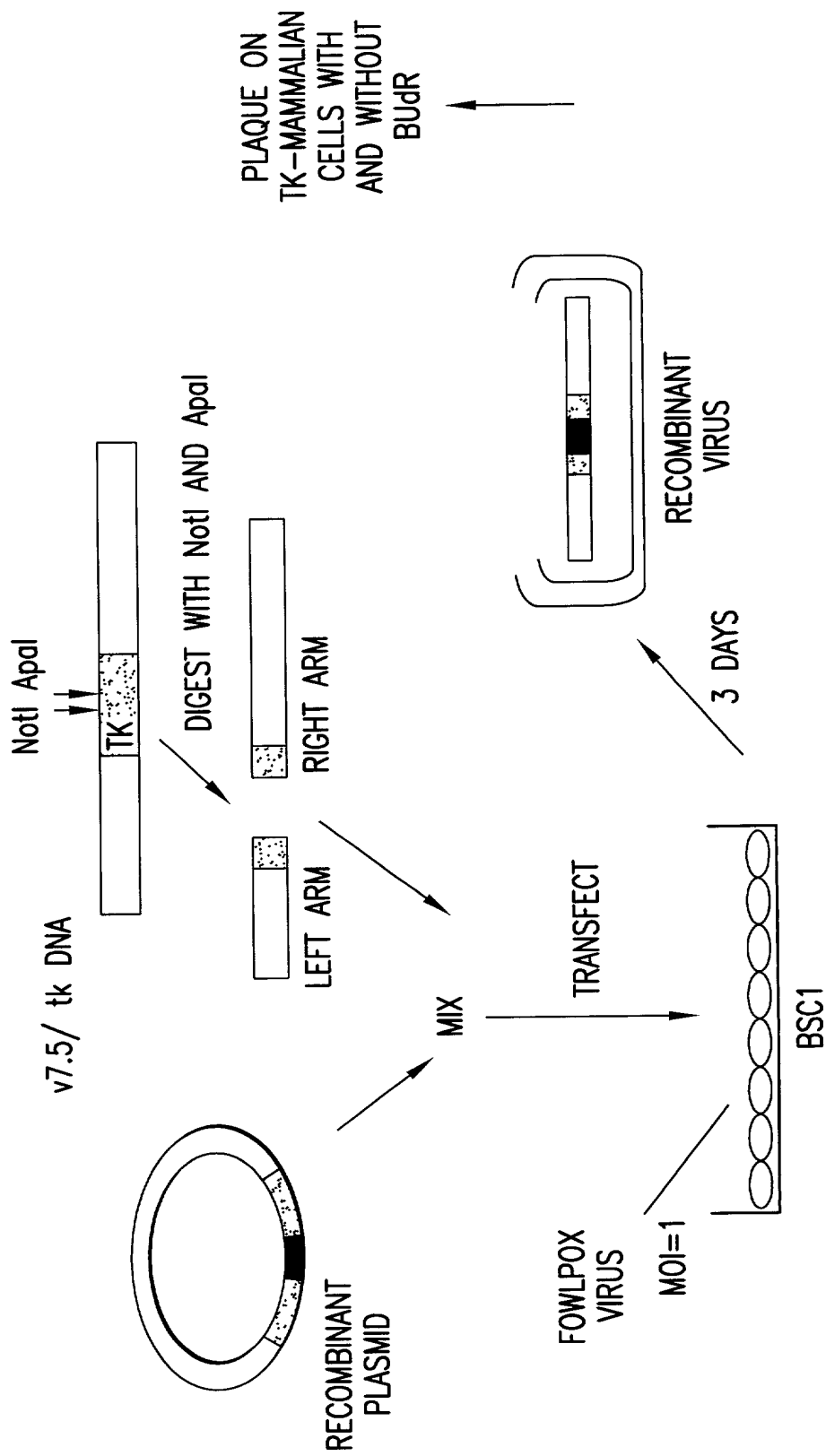


FIG.6

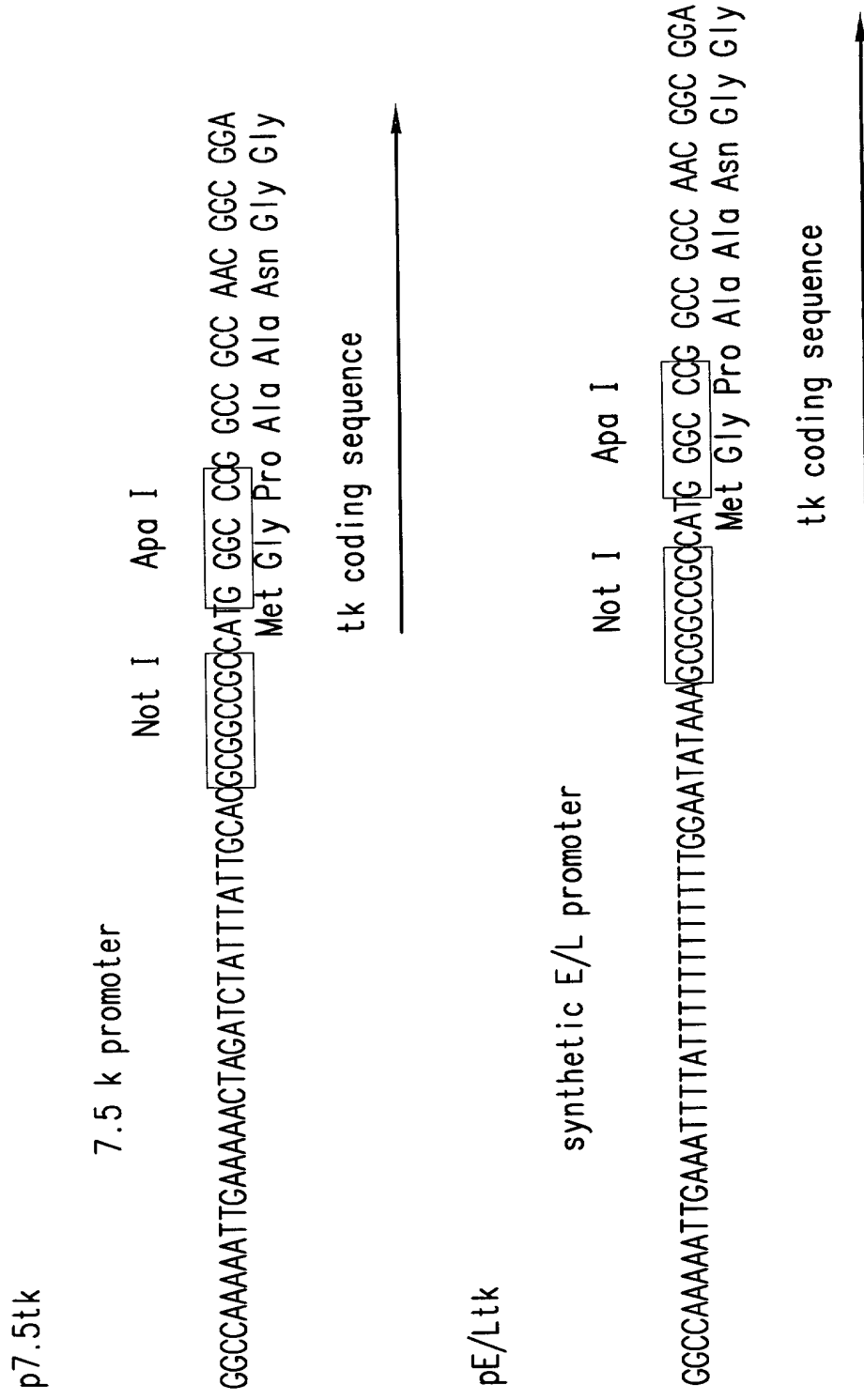


FIG.7

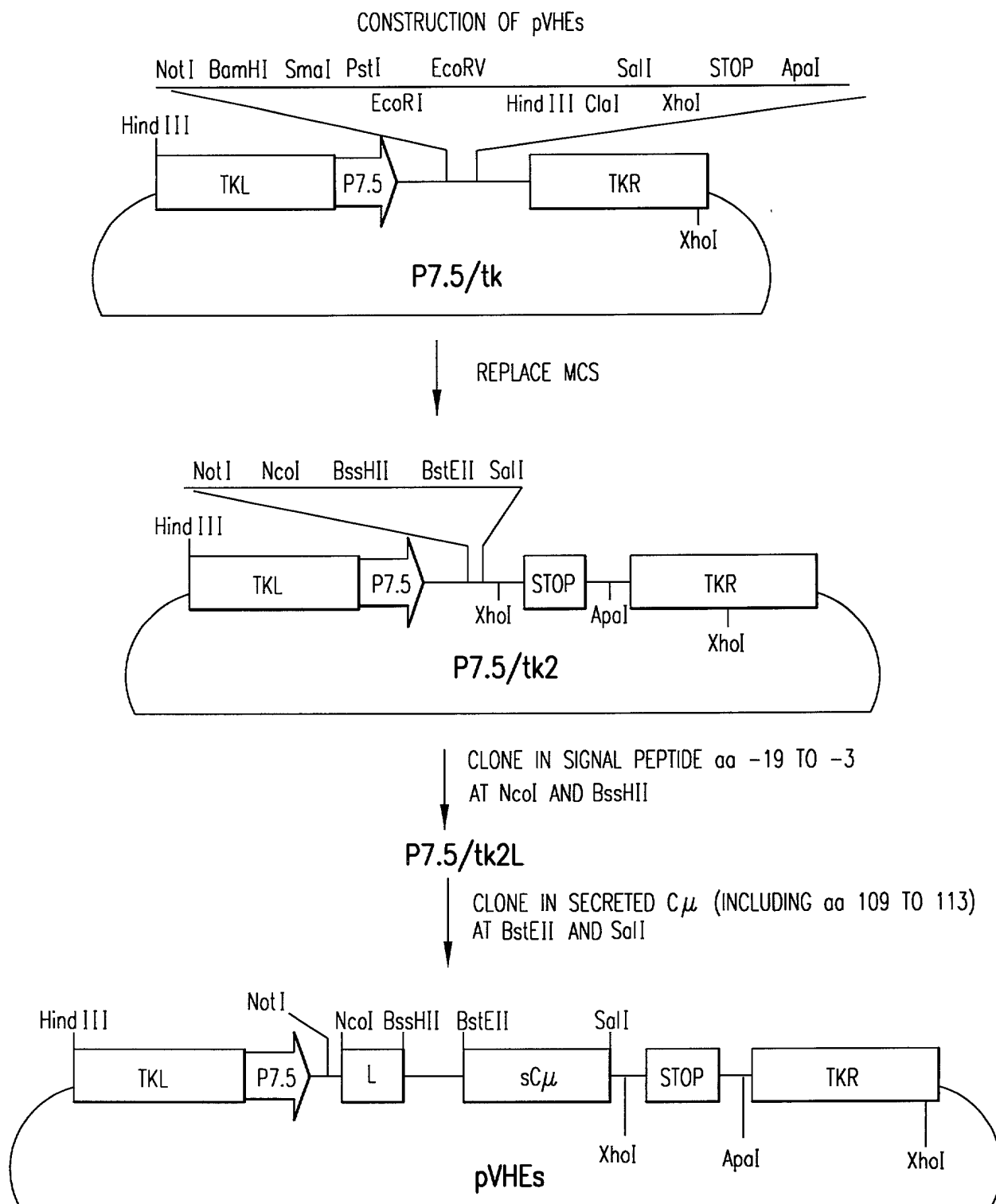


FIG.8

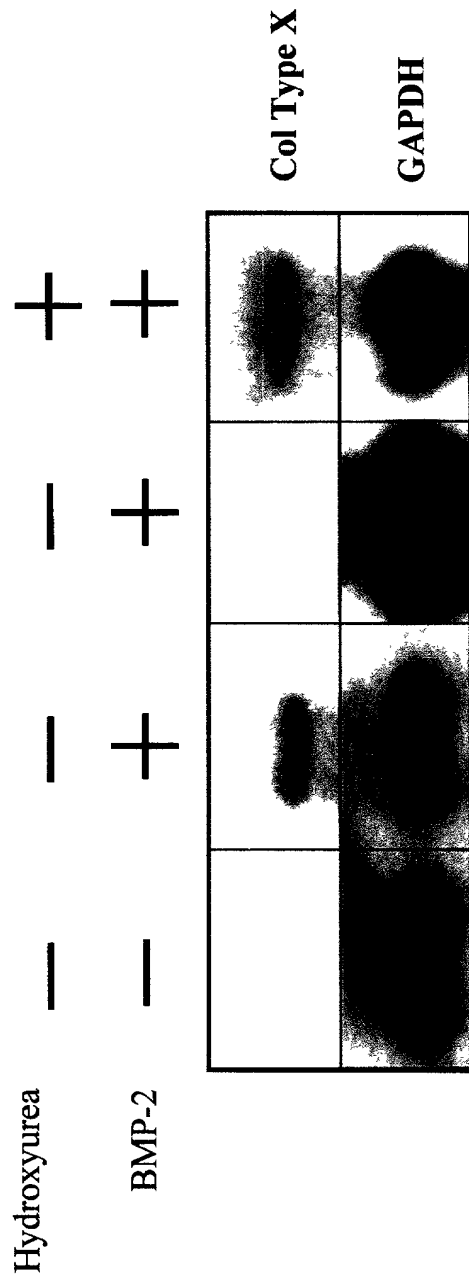
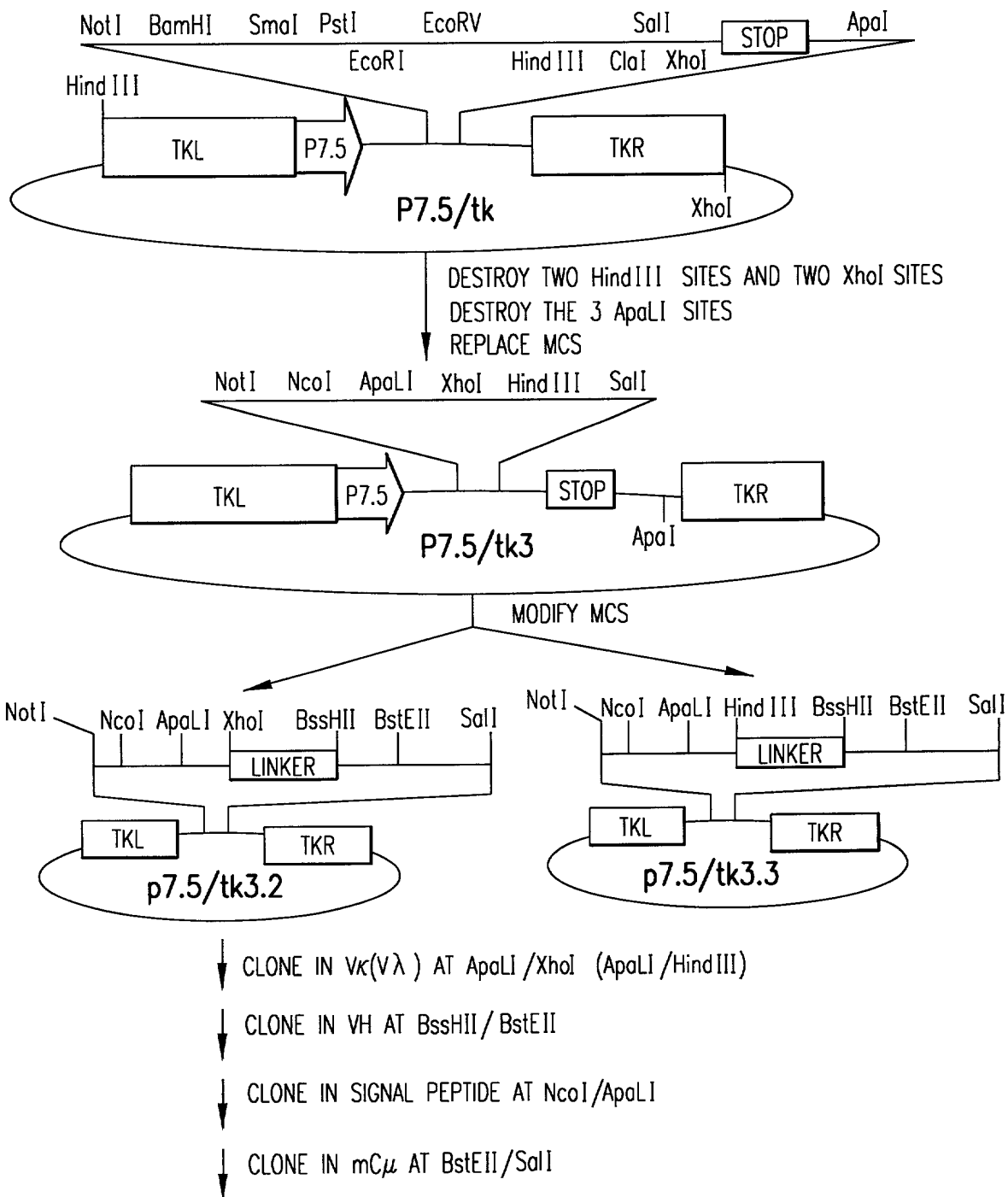
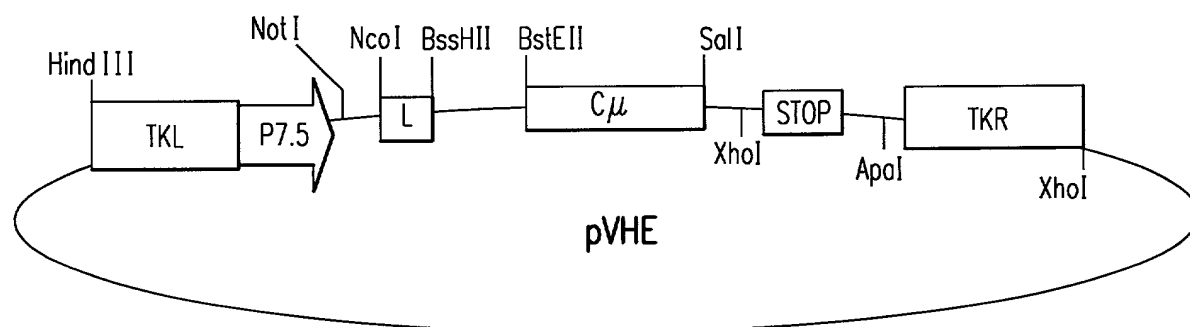


FIG.9



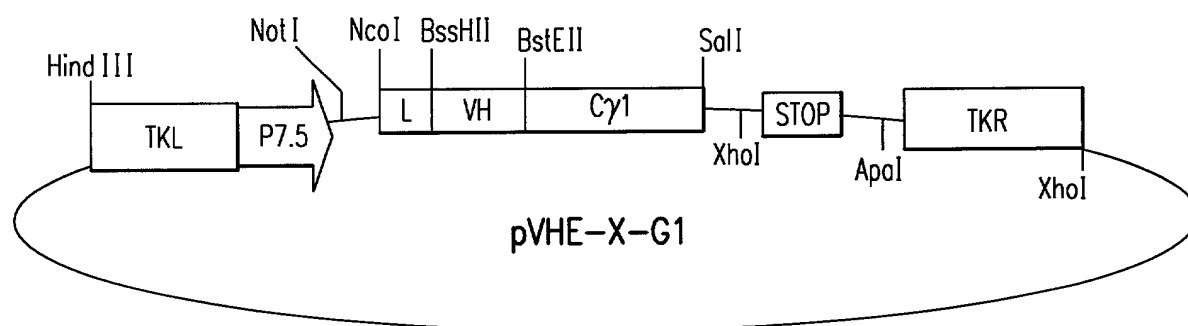
CONSTRUCTION OF scFV EXPRESSION VECTORS

FIG.10



↓ CLONE IN VH-X TO CONSTRUCT pVHE-X

↓ CLONE IN MODIFIED Cγ1



CONSTRUCTION OF pVHE-X-G1.

FIG.11

1. p7.5tk

7.5K PROMOTER NOTI APAI
 5' - GGCCAAAAATTGAAAAACTAGATCTATTATTGCACGGCGCCGCCATGGGCCCGGCC -3'

2. p7.5/ATG0/tk

7.5K PROMOTER NOTI BAMHI SMAI PSTI
 5' - GGCCAAAAATTGAAAAACTAGATCTATTATTGCACGGCGCCCGTGGATCCCCGGGCTGCAGGAA

TRANSLATION TRANSCRIPTION
 STOP CODONS STOP SIGNAL

TTCGATATCAAGCTTATCGATACCGTCGACCTCGAGGGGGGGCCTAACTAAATTTGTTTTGT

APAI

GGGCCCGGCC -3'

FIG.12A

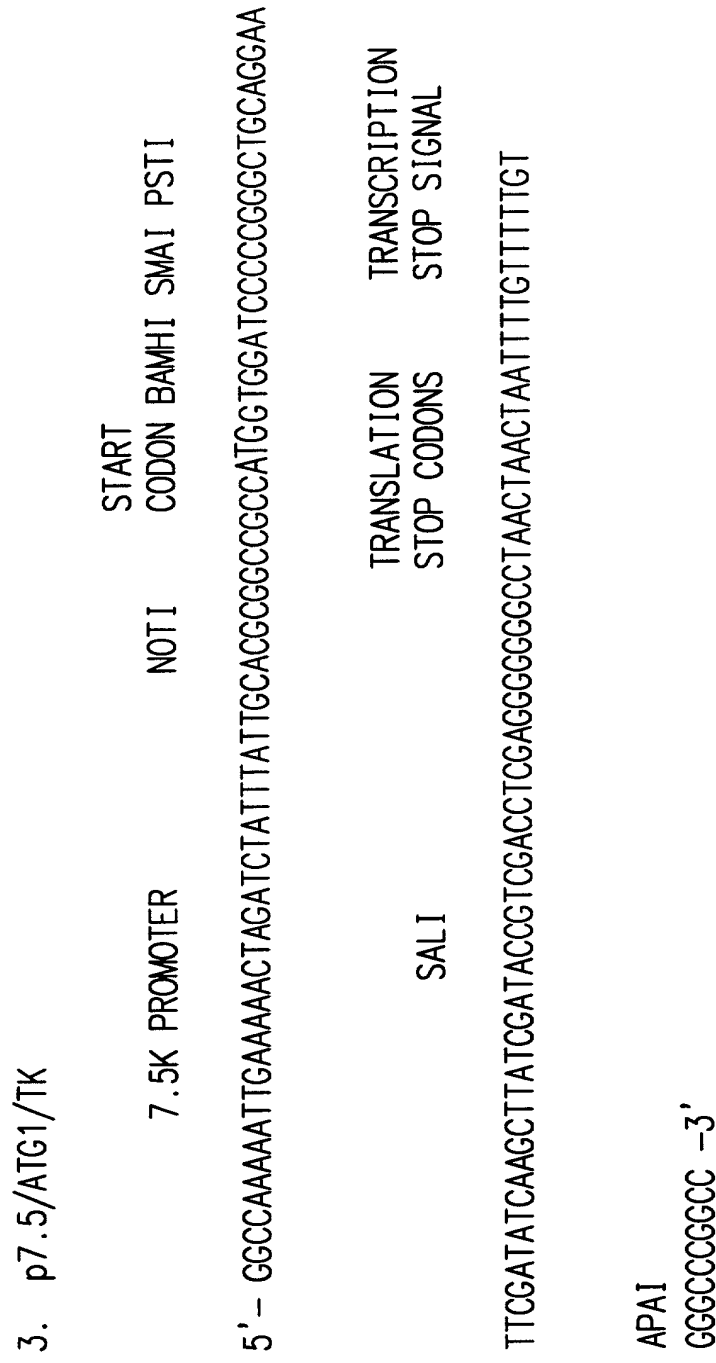


FIG.12B

4. p7.5/ATG2/tk

	7.5K PROMOTER	NOTI	CODON BAMHI	SMAI	PSTI	START
5' –	GGCCAAAAATTGAAAAACTAGATCTATTTATTGCACCGCGCGCCCATGAGTGGATCCCCCGGGCTGCAGGAA					

SALI	TRANSLATION STOP CODONS	TRANSCRIPTION STOP SIGNAL
------	----------------------------	------------------------------

TTCGATATCAAGCTTATCGATACCGTCGACCTCGAGGGGGGCGCTAACTAATTTGTTTTTGT

APAI

GGGCCCCGGCC –3'

FIG.12C

5. p7.5/ATG3/tk

	7.5K PROMOTER	NOTI	START CODON	BAMHI	SMAI	PSTI
5' –	GCCCAAAATTGA AAAACTAGATCTATTTATTGCACGGCGGGCCCATGACGTGGATCCCCCGGGCTGCAGGAA					

	TRANSLATION	TRANSCRIPTION
SALI	STOP CODONS	STOP SIGNAL

TTCGATATCAAGCTTATCGATACCGTCGACCTCGAGGGGGCCCTAACTAATTTGTTTTTGT

APAI

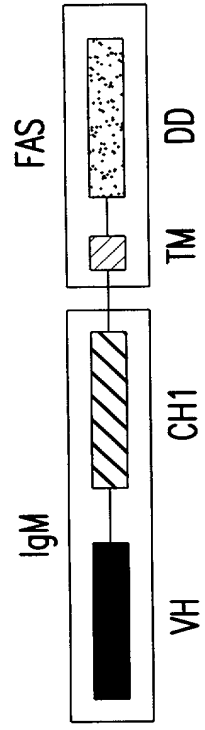
GGGCCCCGGCC –3'

FIG.12D

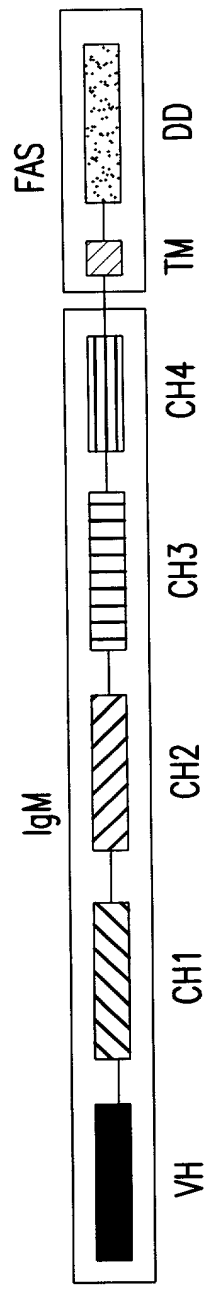
CONSTRUCTION OF IgM-Fas FUSION PRODUCTS

CONSTRUCTS:

(a) VH-CH1-TM-DD



(b) VH-CH1-CH2-CH3-CH4-TM-DD



(c) VH-CH1-CH2-CH3-CH4(TM)-DD

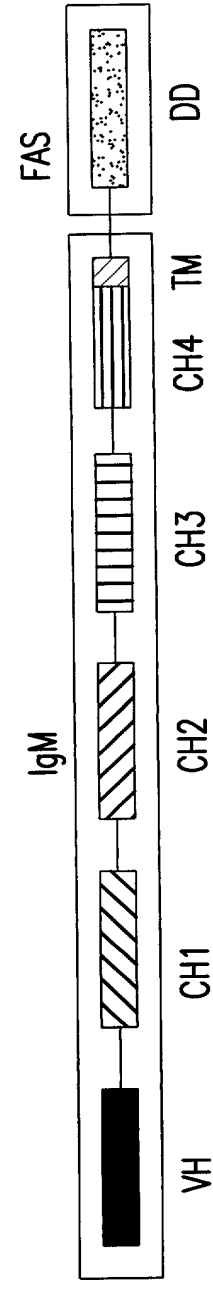
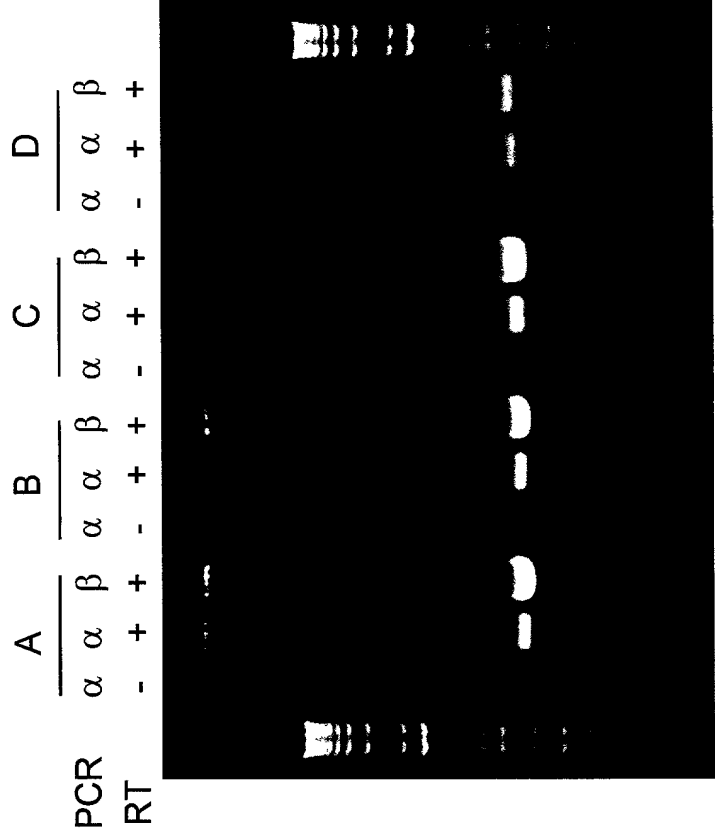


FIG.13



Expression of Ig α and Ig β in the transfected COS7 and HeLaS3 cell lines.

FIG.14